What is claimed is:

SUB A17

1. A method of cataloging information in a database, comprising:

determining a key for referencing a record of information stored in a database;

determining a record address for the record in the database;

determining a cyclical redundancy check value for the key; and

storing the record address in an index at a position corresponding to at least a portion of the cyclical redundancy check value.

2. The method of cataloging information recited in claim 1, wherein the cyclical redundancy check value is a CRC-CCITT cyclical redundancy check value.

3. The method of cataloging information recited in claim 1, wherein the cyclical redundancy check value is a CRC-16 cyclical redundancy check value.

4. The method of cataloging information recited in claim 1, wherein the cyclical redundancy check value is a CRC-32 cyclical redundancy check value.

5. The method of cataloging information recited in claim 1, further including

determining a second cyclical redundancy check value for the key; and

storing the record on one of a plurality of storage devices based upon at least a portion of the second cyclical redundancy check value.

6. The method of cataloging information recited in claim 5, wherein the at least a portion of the second cyclical redundancy check value is the same as the at least a portion of the first cyclical redundancy check value.

7. The method of cataloging information recited in claim 1, further including

determining a second cyclical redundancy check value for the key different from the first cyclical redundancy check value; and

storing at least a portion of the second cyclical redundancy check value in the index with the record address.

8. The method of cataloging information recited in claim 7, wherein the second cyclical redundancy check value is a CRC-CCITT cyclical redundancy check value.

9. The method of cataloging information recited in claim 7, wherein the second cyclical redundancy check value is a CRC-32 cyclical redundancy check value.

10. The method of cataloging information recited in claim 7, wherein the second cyclical redundancy check value is a CRC-16 cyclical redundancy check value.

11. The method of cataloging information recited in claim 7, further including

determining a third cyclical redundancy check value for the key; and

storing the record on one of a plurality of storage devices based upon at least a portion of the third cyclical redundancy check value.

12. The method of cataloging information recited in claim 11, wherein the third cyclical redundancy check value is the same as the first cyclical redundancy check value.

13. The method of cataloging information recited in claim 11, wherein the third cyclical redundancy check value is the same as the second cyclical redundancy check value.

14. The method of cataloging information recited in claim 1, further including storing at least a second portion of the cyclical redundancy check value in the index with the record address.

15. The method of cataloging information recited in claim 14, wherein the cyclical redundancy check value is a CRC-CCITT cyclical redundancy check value.

16. The method of cataloging information recited in claim 14, wherein the cyclical redundancy check value is a CRC-32 cyclical redundancy check value.

17. The method of cataloging information recited in claim 14, wherein the second cyclical redundancy check value is a CRC-16 cyclical redundancy check value.

SUB A27

18. The method of cataloging information recited in claim 1,

wherein the index is divided into index table clusters, each index table cluster having K number of entries with each entry having L number of locations; and

further including

sequentially checking a status of each entry in an index table cluster corresponding to the at least a portion of the cyclical redundancy check value until a first unused entry available to store the record address is recognized, and

storing the record address in the recognized first available unused entry.

19. The method of cataloging information recited in claim 18, further including

if an unused entry available to store the record address is not recognized from sequentially checking a status of each entry in the index table cluster corresponding to the at least a portion of the cyclical redundancy check value, then

creating a second index table cluster corresponding to the at least a portion of the cyclical redundancy check value in the index;

storing an address of the second index table cluster in the first index table cluster; and

storing the record address in a first available unused entry of the second index table cluster.

20. The method of cataloging information recited in claim 18, wherein an initial location of the index table cluster corresponding to the at least a portion of the cyclical

redundancy check value is positioned at an offset *Index(N)* = N * K * L, where N is the at least a portion of the cyclical redundancy check value.

21. A method of obtaining a record of information from a database, comprising:

determining a key for referencing the record in the database;

determining a cyclical redundancy check value for the key;

determining a position in an index corresponding to at least a portion of the calculated cyclical redundancy check value;

retrieving an address for the record from the determined position in the index; and

obtaining the record from the database using the retrieved record address.

22. The method of obtaining a record of information from a database recited in claim 21, wherein the cyclical redundancy check value is a CRC-CCITT cyclical redundancy check value.

23. The method of obtaining a record of information from a database recited in claim 21, wherein the cyclical redundancy check value is a CRC-16 cyclical redundancy check value.

24. The method of obtaining a record of information from a database recited in claim 21, wherein the cyclical redundancy check value is a CRC-32 cyclical redundancy check value.

25. The method of obtaining a record of information from a database recited in claim 21, further including:

determining a second cyclical redundancy check value for the key;

sequentially retrieving a stored at least a portion of a cyclical redundancy check value from each of one or more index entries at the determined position in the index;

comparing each retrieved stored at least a portion of cyclical redundancy check value with at least a portion of the second calculated cyclical redundancy check value

until a stored at least a portion of a cyclical redundancy check value is determined to be identical to the at least a portion of the second calculated cyclical redundancy check value; and

retrieving the address for the record from an index entry at the determined position in the index having the stored at least a portion of a cyclical redundancy check value determined to be identical to the at least a portion of the second calculated cyclical redundancy check value.

26. The method of obtaining a record of information from a database recited in claim 21, further including:

sequentially retrieving a stored at least a second portion of a cyclical redundancy check value from each of one or more index entries at the determined position in the index;

comparing each retrieved stored at least a portion of a cyclical redundancy check value with a second portion of the calculated cyclical redundancy check value until a stored at least a portion of a cyclical redundancy check value is determined to be identical to the second portion of the cyclical redundancy check value; and

retrieving the address for the record from an index entry at the determined position in the index having the stored at least a portion of cyclical redundancy check value determined to be identical to the second portion of the cyclical redundancy check value.

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27. The method of obtaining a record of information from a database recited in claim 21, wherein

the index is divided into index table clusters, each index table cluster having K number of index entries with each index entry having L number of locations; and

an initial location of an index table cluster corresponding to the at least a portion of the cyclical redundancy check value is positioned at an offset *Index(*N*)* = N * K * L, where N is the at least a portion of the cyclical redundancy check value.

28. A computer-readable medium having stored thereon a data structure, comprising:

a first data field having an address for a record in a database, such that a position of the first data field in the data structure corresponds to at least a portion of a cyclical redundancy check value for a key of the record.

29. The computer-readable medium of claim 28, further including:

a second data field having a second portion of the cyclical redundancy check value.

30. The computer-readable medium of claim 28, further including:

a second data field having at least a portion of a second cyclical redundancy check value for the key different from the first cyclical redundancy check value for the key.

31. The computer-readable medium of claim 28, wherein the cyclical redundancy check value is a CRC-CCITT cyclical redundancy check value.

32. The computer-readable medium of claim 28, wherein the cyclical redundancy check value is a CRC-16 cyclical redundancy check value.

33. The computer-readable medium of claim 28, wherein the cyclical redundancy check value is a CRC-32 cyclical redundancy check value.

34. The computer-readable medium of claim 28, wherein

the data structure is divided into index table clusters, each index table cluster having K number of index entries with each index entry having L number of locations; and

an initial location of an index table cluster corresponding to the at least a portion of the cyclical redundancy check value is positioned at an offset $Index(N) = N * K * L$, where N is the at least a portion of the cyclical redundancy check value